Law enforcement is a high-stress occupation that couples long hours of sedentary behavior with short and intense bursts of maximum physical output. Although the cause of line-of-duty deaths change annually, recently heart attacks have been rising while deaths related to firearm and traffic incidents are down. With this, fitness and wellness have become a major concern for police administrators. Ideally, officers should view themselves as athletes who don’t know when, where, or how they will be required to compete. They may face larger opponents or multiple suspects in an encounter. They have to accurately fire a weapon with an elevated heart rate, a physical task so taxing, it is an Olympic sport—the biathlon. Unfortunately, many do not prioritize the need to stay fit. A recent article in *Cardiology in Review* noted that currently employed police personnel have a high prevalence of risk factors associated with cardiovascular disease, such as hypertension, metabolic syndrome, tobacco use, and sedentary lifestyles. Poor lifestyle choices coupled with additional occupational risk factors, including shift work, acute physical exertion, and stress, further enhance cardiovascular and other health related risks. Physical fitness and healthy lifestyle choices are effective means to help mitigate these dangers.

Additionally, law enforcement officers face a greater potential for physical injury than the average worker. Given these physical risks and occupational challenges, officers must take a well-rounded approach to fitness. The type of rest, hygiene, diet, and exercise program that each individual maintains determines his or her fitness and consequent health level. Officers therefore need to understand the importance of physical fitness as it relates to personal health and professional job performance.

**Scope of the Problem**

Public safety employees face a variety of dangers every day and as a result have injury and fatality rates three times higher than workers in non-safety occupations. The most common assumption regarding law enforcement injuries and deaths is that they occur during violent encounters with armed suspects. Although indicative of common high-profile events, the reality is accidental deaths have outnumbered felonious deaths for the past 15 years. The 2008 Survey of Occupation Injuries and Illnesses documented an incidence rate of 14.5 injuries per 100 full-time local law enforcement officers and a rate of 5.9 for state law enforcement officials. In 2011, the International Association of Chiefs of Police (IACP) along with the Bureau of Justice Assistance (BJA) conducted a 12-month prospective study on police officer injuries. Eighteen agencies of varying size and locality participated in the study, thoroughly documenting reports of pain or discomfort reported by officers during the study period. Agencies reported a total of 1,285 injuries, resulting in 5,732 lost workdays. Data collected in the study showed that 78.8 percent of the officers reporting injury were classified as overweight or obese by their Body Mass Index (BMI). It is important to note that BMI correlates with body fat but does not measure body fat. A BMI calculator may overestimate body fat in athletes or others with a

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muscularity build because it does not consider lean muscle mass. However, evidence has shown that as a person’s BMI increases, so does the risk for many chronic illnesses such as heart disease, cancer, and diabetes. For example, individuals with BMIs greater than 40 are seven times more likely to be diagnosed with diabetes and six times more likely to have high blood pressure than their normal body weight peers.4

The IACP study also indicated statistically significant relationships between body weight and lost workdays as well as body weight and days required for rehabilitation. The data suggest that heavier officers were more likely to report additional lost workdays and rehabilitation days than their lower weight peers.

Studies have shown that physical fitness and exercise reduce stress and improve long-term health. A sedentary lifestyle doubles one’s risk of coronary artery disease and leads to a higher risk of stroke, colon cancer, and back injuries. Only 22 percent of American adults perform the recommended amount of light to moderate exercise per week.5 Americans in general are not as fit as they should be, and police officers are no exception.

Cardiovascular endurance, muscle strength, and anaerobic power are all required for successful job performance as a law enforcement officer. The average time it takes to subdue a combative or resisting subject can vary between 30 seconds and two minutes. For apprehensions or other physical tasks lasting more than two minutes, officers use 75 to 90 percent of their maximum capability, a requirement many law enforcement personnel are not fit enough to handle.6 Despite the rigorous requirements of the job, a 1993 study by the Cooper Institute showed that law enforcement officers were less fit than the general population in regard to aerobic fitness, body fat, and abdominal strength.7 Additionally, the IACP study showed that only 17 percent of the officers reporting injury got the United States Department of Health and Human Services recommended amount of daily exercise.

Law enforcement officers have a greater morbidity and mortality rate than the general population. In fact, the risk of experiencing a heart attack doubles with each decade of law enforcement service. Inactivity and poor nutrition habits exacerbate this concern. Officers who don’t participate in a fitness program are more likely to suffer a heart attack than those that do. The potential to suffer a heart attack increases even more if an inactive officer has additional risk factors such as smoking, high blood pressure, or high cholesterol. One study of a major metropolitan police department showed that almost 50 percent of the officers had at least three of the noted risk factors.

A lack of physical fitness can also hinder an officer’s ability to perform his or her job, potentially exposing an agency to unnecessary civil liability. This is especially true regarding allegations of excessive force. In the case Parker v. District of Columbia,8 the officer, returning from an injury, lacked the necessary fitness to apply defensive tactics techniques and fearing for the public’s safety shot the suspect. The court ruled that the police department was deliberately indifferent to the training needs of the officer, thereby placing the public at risk and ruled in favor of the plaintiff.

Physical fitness enhances one’s ability to respond to an assault but also can deter a suspect from attacking. The FBI conducted several in-depth interviews with suspects convicted of murdering or seriously injuring law enforcement officers. The interrogations showed that offenders often sized up their victims prior to determining what they were going to do. Most articulated that the deciding factor in choosing to attack was whether or not they believed they could win. If the officer appeared “fat” or “sloppy” they saw him or her as an easy target and capitalized on the situation. If the officer appeared “fit” or “professional,” the suspect hesitated.9 Officers need to realize the significance of the signals they are sending and take the necessary preventative steps to maximize their protection.

Unfortunately, shift work, overtime, long commutes, and the convenience of unhealthy food all add to the problem. The regrettable consequence is an overweight and unfit police force.

**Physical Fitness Defined**

Physical fitness means dynamic health and body efficiency. Fitness is not necessarily the same as being heavily muscled or being a skilled athlete. For officers, fitness is having the energy to carry out daily law enforcement job requirements effectively with reserve energy to meet emergencies. Overall fitness can be divided into four areas:

**1. Cardio-respiratory endurance.** This area of fitness is the most important. It relates to an efficient heart-lung system in our bodies. The ability of this system to deliver oxygen is the primary measure of body efficiency and is often called aerobic fitness. A strong heart-lung system enables an officer to accomplish daily tasks safely without fatigue.

Endurance can be broken down into two categories: anaerobic and aerobic. Anaerobic endurance relates to the ability of muscles to function without oxygen and usually occurs during high-intensity efforts over a short period of time. Aerobic endurance is the ability of muscles to sustain long periods of physical exertion. For complete overall fitness, an individual must develop both types of endurance.

**2. Strength.** Good muscle tone and strength improve the ability of skeletal muscles to contract repeatedly and increase the force of those muscles. Static strength occurs when the muscle does not lengthen and there is no movement in the joint. This type of strength is seen when a steady amount of force is exerted on an object, such as when moving or lifting. In comparison, dynamic strength is the ability to apply force repeatedly over a period of time. An example of dynamic strength is performing reps while weight lifting.
The Value of Fitness

Fitness plays an important role in maintaining physical, emotional, and intellectual well-being. The benefits of fitness, particularly the reduction of stress-related disorders and coronary problems, are realized in both the personal and professional lives of police officers.

Physical Functioning. Fitness affects the body’s ability to function in various ways. Fitness is also directly related to the prevention of illness.

- Maintenance of physical health and energy. The body’s ability to utilize energy centers around its ability to utilize oxygen efficiently. The more efficient the body is in the intake and utilization of oxygen and in expelling byproducts such as carbon dioxide, the more energy is available to the body to perform the tasks demanded of it. Thus, physically fit officers have more energy to devote to their job and leisure pursuits.
- Prevention of heart disease. Studies show that law enforcement officers as a group score very high on certain coronary risk factors such as smoking, lack of exercise, cholesterol in the diet, obesity, and high blood pressure. Increasing physical fitness has the effect of reducing those coronary risk factors. A program for fitness that lowers these risk factors decreases the likelihood of heart disease and subsequently illness, disability, and early retirement.
- Prevention of diseases brought on by an inactive lifestyle. Flexibility and muscular endurance activities can have a direct bearing on prevention and rehabilitation of lower back problems, physical tension, and ulcers.
- Control of weight. Exercise that increases physical fitness has a direct bearing on weight control.

Medical Wellness

Medical wellness is measured through the use of clinical tests performed by trained medical professionals during regular physical examinations. Police officers suffer from above-average frequency of hypertension and hyperlipidemia (too much fat in the blood), among a host of other disorders. Both of these conditions can have serious, long-term effects including disability and death. Regular medical examinations, including routine blood tests, should be considered an integral part of an effective physical fitness plan. Officers should adhere to recommended lifestyle changes or medication regimes in order to achieve the desired results.

Developing a Healthy Lifestyle

The development of a healthy lifestyle is the backbone of overall fitness. The following are the various necessary components:

Exercise. Officers should engage in regular physical exercise focused on preparing them for the physical challenges and tasks of police work, while also giving them the physical capacity to enjoy leisure activities during their time off. More information regarding the frequency, duration, and intensity of exercise that should be obtained will be provided in the second part of the Training Key®.

Diet/Nutrition. Diet relates to the energy intake of the body's system. A way of viewing diet is in terms of the quality and quantity of food consumed. However, officers should not think of nutrition as “diet-based” eating, but rather the selection of foods and cooking styles necessary to form the basis of a long-term, sustainable plan to maintain health and longevity and maximize performance. This topic will be discussed in more detail in the second part of this Training Key®.

Rest. Sleep and relaxation are the vital elements of rest. The average adult requires eight hours of sleep each night, with some individuals being able to function on as few as six hours and others needing as many as ten. However, studies have shown that most Americans get one to one and a half fewer hours of sleep than needed every night. Law enforcement officers, who must cope with a high level of work-related stress, as well as a demanding schedule including shift rotation, are often unable to obtain even this lesser number of quality sleep hours. According to a study published in 2000, the average police officer slept 6.6 hours, while 4 percent of the officers polled received less than five hours of sleep per 24-hour period.
any hours of sleep that are missed, a sleep debt accumulates, which can be corrected only by “making up” these lost hours. There are several ways to lessen the ill effects of fatigue. Suggestions for good sleep hygiene include the following:

- Making the bedroom as dark as possible, using blackout curtains if necessary
- Blocking noises, which may include turning off the telephone, using ear plugs, or utilizing white noise – whether it is from a radio set to static or a white noise machine
- Making the bedroom cool, between 60 and 65 degrees is recommended
- Maintain a regular sleep schedule, going to sleep and waking up at the same time each day
- Avoiding caffeine, alcohol, and nicotine before sleep

Relaxation is an equally important component of rest. Periodic relaxation exercises, which are particularly effective before bedtime, can alleviate the undue stress and tension that build throughout the day. Yoga and meditation are helpful for some, while reading is useful for others.

**Hydration.** Fluid intake supports healthy body function and promotes optimal physical performance. Hydration should be maintained by drinking clear liquids, primarily water. Officers should be mindful of the high sugar content of sports drinks to avoid the consumption of excess calories. Proper hydration levels can vary from person to person and various methods have been suggested, from drinking eight, eight-ounce glasses of water daily to simply drinking when you are thirsty. The easiest test of proper hydration levels is urine color. Generally speaking, when properly hydrated, a person’s urine will be light yellow to clear in color.

**Alcohol.** Although moderate alcohol consumption (one drink per day) has been shown to have potential health benefits, excessive alcohol intake has been tied to liver disease and some cancers. Despite alcohol’s relaxing effects, it should not be used to reduce stress or treat anxiety. It is not a healthy alternative to other stress reduction methods such as exercise, social interaction, or mental health counseling.

In 2012, 30.4 percent of males 12 and older and 16.0 percent of females reported binge drinking (five or more drinks on the same occasion) in the past month; and 9.9 percent of males and 3.4 percent of females reported heavy alcohol use (binge drinking on at least five separate days in the past month). If excessive alcohol consumption becomes an issue, officers may choose to seek help from their department’s mental health provider or from organizations such as Alcoholics Anonymous.

**Tobacco.** Smokers, as well as users of smokeless tobacco products, face increased rates of serious illnesses including cancer; lung disease; heart attacks, strokes, and blood vessel diseases; blindness; and shortening of life span. Based on data collected in the late 1990s, the US Centers for Disease Control and Prevention (CDC) estimated that adult male smokers lost an average of 13.2 years of life and female smokers lost 14.5 years of life because of smoking. Half of all smokers who keep smoking will end up dying from a smoking-related illness. In the United States alone, smoking is responsible for nearly one in five deaths, and about 8.6 million people suffer from smoking-related lung and heart diseases.

While many departments have already taken steps to prevent and discourage tobacco use among their employees, it is ultimately the responsibility of the current smoker to quit. While stopping any addictive behavior is difficult, the benefits of quitting smoking are overwhelming, including immediate advantages such as a drop in blood pressure and heart rate within 20 minutes. There are several products designed to assist the smoker in quitting, such as nicotine patches and gum and prescription medications. In addition, support programs are available including those offered by the American Cancer Society and Smoke-free.gov.

**Mental/Emotional Health.** Police officers are the guardians of society, providing assistance to those in distress and risking their lives in the process. However, this duty does not come without cost to the guardians themselves. Officers who are exposed to high levels of stress and trauma on a regular basis can become depressed and despondent. When this is combined with the stressors of everyday life, normal life difficulties, such as family finances or relationship challenges, can seem insurmountable.

Just as officers need to care for their physical health through exercise, routine medical exams, and intelligent lifestyle choices, they also need to provide for their mental health. According to the National Institute of Mental Health estimates that 26.2 percent of Americans ages 18 and older—about one in four adults—suffer from a diagnosable mental disorder in a given year. Unfortunately, a stigma still exists around seeking help from mental health providers. Officers may feel that they will be judged as weak or “crazy” if they take advantage of available mental health therapy options. Individual officers and departments as a whole should discourage this negative viewpoint, instead encouraging those who are struggling to seek this very necessary help.

While statistics vary, everyone can agree that the rate of suicide among law enforcement officers is alarming. According to one study, 91 percent of suicides were by males; ages 40–44 were most at risk; officers with 15 to 19 years on the job were most at risk; 63 percent of suicide victims were single; and 11 percent of suicides were veterans. By promoting mental health awareness, it may be possible to prevent some officers from taking their own lives.

**Summary**

The physical demands of the law enforcement profession require officers to react quickly in dynamic and stressful situations. Many of the associated tasks, such as running, climbing, jumping, and dragging,
difficult enough to perform under normal conditions but officers often complete them under duress, in extreme weather conditions, and wearing 30 pounds of extra gear. Despite this, many fail to maintain the necessary level of fitness.

To reap the benefits of a total fitness and wellness program, officers should receive informative training on health risks and nutrition as they relate to obesity and physical inactivity as well as have routine physical exams and health screens. Many Americans do not understand the nutritional content of their food choices. With the proper knowledge, officers will be able to make informed decisions about what they are eating and learn to make healthy decisions that will assist in reducing numerous diseases, which include high blood pressure, high cholesterol, and diabetes, and assist with weight management. Nutritional and educational programs such as these do not have to be law enforcement specific. Oftentimes, departments can work within other agencies within their local government to develop programs that are mutually beneficial to all of the public sector employees.

A total fitness and wellness program is mutually beneficial to law enforcement officers as well as their agencies. Participants profit from an increased capability to perform job functions, reduced stress, and improvement in overall health. Agencies benefit from the reduced costs associated with injuries, disability claims, and backfilling for positions. Additionally, fitness and health programs have been attributed to employee loyalty, increased morale, and reduced turnover and have resulted in increased efficiency and productivity. Studies have shown that more fit and active officers receive better performance evaluations and have 40 to 70 percent less absenteeism than their unfit peers.18

Officers must recognize the importance of remaining fit, not only for themselves but for the public they serve.

Acknowledgment

This Training Key® was developed by Lieutenant David Giroux and Captain Adrienne Quigley of the Arlington (VA) Police Department.

Endnotes

2 Tom LaTourrette, David S. Loughran, and Seth A. Seabury, S. Occupational Safety and Health for Public Safety Employees: Assessing the Evidence and Implications for Public Policy (Santa Monica, CA: RAND Corporation, 2008).
7 Ibid., 8.
12 For more information, please refer to Training Key #633 “Police Fatigue.”
15 Ibid.
questions

The following questions are based on material in this Training Key®. Select the one best answer for each question.

1. Which of the following is a benefit of physical fitness?
   
   (a) Prevention of heart disease  
   (b) Increase of basic stamina and strength  
   (c) Prevention of diseases brought on by an inactive life style  
   (d) All of the above

2. Which of the following is suggested as part of proper sleep hygiene to lessen the ill effects of fatigue?
   
   (a) Blocking noises  
   (b) Drinking caffeine or alcohol before sleep  
   (c) Keeping the bedroom warm  
   (d) Having a bedside lamp on at all times

3. Hydration is maintained by drinking clear liquids, primarily water.
   
   (a) True  
   (b) False

answers

1. (d) All of the above. Fitness plays an important role in maintaining physical, emotional, and intellectual well-being. The benefits of fitness include increase of basic stamina and strength, prevention of diseases brought on by an inactive life style, control of weight, prevention of heart disease and maintenance of physical health and energy.

2. (a) Sleep and relaxation are vital elements of rest. Blocking noises, which may include turning off the telephone, using ear plugs, or utilizing white noise, whether it is from a radio set to static or a white noise machine, will help.

3. (a) True. Fluid intake supports healthy body function and promotes optimal physical performance.